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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,426	12/22/2000	Balaji Raghunathan	0007056-0176/P5745NP/ARG/	1482

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EXAMINER

NEURAUTER, GEORGE C

ART UNIT PAPER NUMBER

2143

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/747,426	RAGHUNATHAN ET AL.	
	Examiner	Art Unit	
	George C. Neurauter, Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10, 12-17, 19-24, 26-28 and 36-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-17, 19-24, 26-28 and 36-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1-3, 5-10, 12-17, 19-24, 26-28 and 36-43 are currently presented and have been examined.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 October 2006 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-10, 12-17, 19-24, 26-28 and 36-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 6, 8, 13, 15, 20, 22, 27, and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6 128 612 to Brereton et al in view of US Patent 6 427 161 to LiVecchi.

Regarding claim 1, Brereton discloses a method in a data processing system having a program for a server to handle one or more client requests, the method comprising the steps of:

obtaining one or more of said client requests (referred to within the reference as "query") for hierarchically organized data at a server; dividing ("parsing") said client requests into one or more smaller units ("clause objects" or "query clause objects" and "joiners" or "joiner clauses"), said smaller units being a unit serviceable by a worker thread ("translator");

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placing said smaller units in a queue ("FIFO postfix queue"); and servicing said units in order. (column 3, lines 15-28; column 5, lines 46-56; column 6, lines 20-67, specifically lines 20-40)

Brereton does not expressly disclose wherein each of the smaller units are a transaction request serviceable by one of a plurality of worker threads, however, LiVecchi does disclose wherein one of a plurality of worker threads service a transaction request from a client for hierarchically organized data after retrieving the request from a queue and servicing the request in order (column 2, lines 16-36; column 11, lines 1-37 and 45-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since LiVecchi discloses that servicing of requests by a plurality of worker threads allows the requests to be balanced over all of the threads (column 7, lines 24-26; column 13, lines 15-17). In view of these specific advantages and that the references are directed to receiving and processing client requests within queues, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary

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skill to reasonably expect a successful combination of the teachings.

Claims 8, 15, and 22 are also rejected since these claims recite substantially the same limitations as recited in claim 1.

Regarding claim 6, Brereton and LiVecchi disclose the method of claim 1.

Brereton discloses wherein said queue is handled using a FIFO scheduling algorithm ("FIFO postfix queue"; see also column 5, lines 46-56 and column 6, lines 20-67, specifically lines 20-40)

Claims 13, 20, and 27 are also rejected since these claims recite substantially the same limitations as recited in claim 6.

Regarding claims 36-39, Brereton and LiVecchi disclose the limitations recited in claims 1, 8, 15, and 22 respectively.

Brereton does not expressly disclose wherein a plurality of client requests are received and units from the plurality of client requests are placed in the same queue, however, Brereton does disclose creating units from a client request as shown above.

LiVecchi discloses wherein a plurality of client requests are received and the plurality of client requests are placed in the same queue (column 15, lines 41-53; column 16, lines 3-16, specifically lines 14-16)

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since LiVecchi discloses that placing a plurality of client requests within the same queue allows a plurality of processes which process requests to access the queue and process the request (column 17, lines 40-67). In view of these specific advantages and that the references are directed to receiving and processing client requests within queues, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claim 40-43, Brereton and LiVecchi disclose the limitations recited in claims 36-39 respectively.

Brereton does not expressly disclose wherein the plurality of client requests are received through a plurality of sockets, and wherein the worker thread services units received through at least two of the plurality of sockets, however, Brereton does disclose creating units from a client request as shown above.

LiVecchi discloses wherein the plurality of client requests are received through a plurality of sockets, and wherein the worker thread services the requests received through at least

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two of the plurality of sockets. (column 15, lines 41-53; column 16, lines 3-16, specifically lines 14-16)

Claims 40-43 are rejected since the motivations regarding the obviousness of claims 36-39 also apply to these claims.

Claims 2-3, 5, 7, 9-10, 12, 14, 16-17, 19, 21, 23-24, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brereton and LiVecchi and in further view of US Patent Application Publication 2002/0069157 to Jordan.

Regarding claims 2, 9, 16, and 23, Brereton and LiVecchi do not expressly disclose wherein said client requests are in XML format, however, Jordan does disclose these limitations (paragraph 0217 and 0219).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since these references are directed to and disclose obtaining requests for hierarchically organized data, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claims 3, 10, 17, and 24, Brereton and LiVecchi do not expressly disclose wherein said hierarchically organized

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data is stored using a Document object Model, however, Jordan does disclose these limitations (paragraph 0217).

Claims 3, 10, 17, and 24 are rejected since the motivations regarding the obviousness of claims 2, 9, 16, and 23 also apply to claims 3, 10, 17, and 24.

Regarding claims 5, 12, 19, and 26, Brereton and LiVecchi do not expressly disclose wherein the server is a registry server, however, Jordan does disclose this limitation (paragraph 0057).

Claims 5, 12, 19, and 26 are rejected since the motivations regarding the obviousness of claims 2, 9, 16, and 23 also apply to claims 5, 12, 19, and 26.

Regarding claims 7, 14, 21, 28, and 35, Brereton and LiVecchi do not expressly disclose wherein said units are defined by an XML <envelope> and an XML </envelope> tag, however, Brereton does disclose wherein the units are defined by particular tags (column 5, lines 46-56; column 6, lines 20-67, specifically lines 20-40, note "/e sub=car")

Jordan discloses wherein said units are defined by an XML <envelope> and an XML </envelope> tag ("SOAP"; paragraph 0219).

Claims 7, 14, 21, 28, and 35 are rejected since the motivations regarding the obviousness of claims 2, 9, 16, and 23 also apply to claims 7, 14, 21, 28, and 35. 2.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is 571-272-3918. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

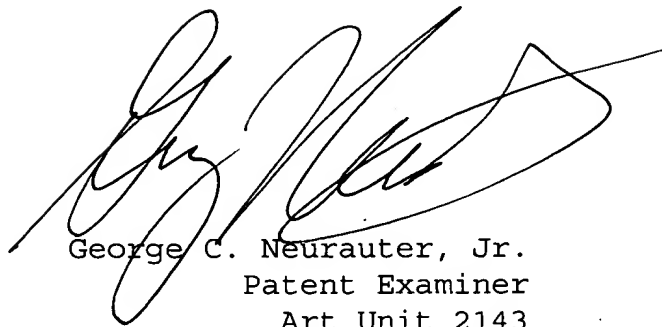
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "G. Neurauter, Jr.", is written over the printed name and title. The signature is stylized with large, sweeping loops.

George C. Neurauter, Jr.
Patent Examiner
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